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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/314,518

05/19/1999

WAYNE D. GROVER

T-L-CASE-4

5305

7590

07/06/2004

FLYNN THIEL BOUTELL & TANIS PC  
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EXAMINER

TRAN, THIEN D

ART UNIT

PAPER NUMBER

2665

15

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/314,518

Applicant(s)

GROVER ET AL.

Examiner

Thien D Tran

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 11-16, 20-22, 24-30 are rejected under 35 U.S.C. 102(e) as being participate by Ellinas et al (U.S Patent No 6,331,905 B1).

Regarding claims 11, 29, 30, Ellinas discloses a telecommunication network comprising:

plural interconnected routers (nodes), figures 12; and

at least one protecting router comprising a router table, the router table having an entry identifying an alternative route around an adjacent router to the protecting router in case of failure of the adjacent router, where the adjacent router is a separate one of the

plural interconnected routers from the protecting router. See col.11 lines 5-25, col.19 lines 35-50 and figures 13-15.

Regarding claim 20, Ellinas discloses a method of protecting against router failure in a network, in which the network includes plural interconnected routers, the method comprising the step of:

storing at a protecting router an entry identifying a cycle of routers that form at least one alternative route around an adjacent router to the protected router, in which the cycle of routers includes all routers directly connected to the adjacent router and not the adjacent router. See col.10 lines 40-60.

Regarding claim 12, Ellinas discloses that a router table has an entry identifying a port associated with the alternative route. See figure 14

Regarding claims 13, 21, Ellinas discloses that the alternative route includes a cycle of routers directly connected to the adjacent router and there is associated with each router in the cycle of routers a routing table with an entry identifying the cycle of routers. See col.7 lines 35-45.

Regarding claims 14, 26, 27, Ellinas discloses the protecting router, comprising a router table, the router table having an entry identifying a cycle of routers directly connected to an adjacent router to the protecting router, the cycle of routers not including the adjacent router. See figure 11, col.17 lines 10-25.

Regarding claims 15, 28, Ellinas discloses that the router table has an entry identifying a port associated with the cycle of routers. See figure 14.

Regarding claims 16, 25, 24, Ellinas discloses that the protecting router has a router table in which is stored, for each adjacent router to the protecting router, an entry identifying a cycle of routers directly connected to the adjacent router to the protecting router, each cycle of routers not including the respective adjacent router. See col.15 lines 30-50.

Regarding claim 22, Ellinas discloses a number of routing paths in a group cycle (path cost field). See figure 13.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellinas et al (U.S Patent No 6,331,905 B1) in the view of Olson et al (U.S Patent No. 4,679,189).

Regarding claims 17, 23, Ellinas discloses a data packet for a network of routers, where the routers form separate routers of a telecommunications network, data packet comprising: a restoration network specifies a cycle of routers in which the routers in the cycle are all adjacent a router not in the cycle and a data message (data field), and the router not in the cycle is a separate router of the telecommunications network from the routers in the cycle. See col.11 lines 60-65 and col.18 lines 30-50.

Ellinas does not disclose that the data message or packet comprising an ID field specifies a cycle of routers. However, Olson discloses that the packet comprising field identifying alternate route when there is a failure in a connection of a primary route, figure 6, col.11 lines 25-35. Therefore, it would have been obvious to one having ordinary skill in the art to change the field indicating the alternate route of Olson to become an indication of rerouted cycle of Ellinas so that the congestion or loss of data due to the failure in the network can be alleviated.

Regarding claims 18, 19, Ellinas discloses a number of routing paths in a group cycle (path cost field). See figure 13.

### ***Response to Arguments***

5. Applicant's arguments filed 04/05/2004 have been fully considered but they are not persuasive.

Applicant argues that Ellinas does not teach the protected node used for as an adjacent node for rerouting when the node failed. However, Examiner respectfully disagrees with the argument because Ellinas a rerouted cycle of adjacent nodes not only in the case of the central switch fails but also in the case of a complete failure of the node with all degree, thereby the adjacent neighboring nodes used for rerouting data, col.19 lines 35-50.

***Conclusion***


6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (703) 308-4388. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (703) 308-6602. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thien Tran



STEVEN NGUYEN  
PRIMARY EXAMINER